

UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMEDCE United States Patent and Trademark Office Address: COMMISSIONER FOR PATENTS P.O. Box 1450 Alexandria, Virginia 22313-1450 www.uspto.gov

DATE MAILED: 02/25/2004

FIRST NAMED INVENTOR ATTORNEY DOCKET NO. APPLICATION NO. FILING DATE CONFIRMATIO 04/06/1999 28076/SV703A 5439 09/286,794 MARK E. BAER **EXAMINER** 02/25/2004 7590 MARSHALL O'TOOLE GERSTEIN MURRAY & BORUN BLOUNT, STEVEN 6300 SEARS TOWER ART UNIT PAPER NUMBER 233 SOUTH WACKER DR CHICAGO, IL 606066402 2661

Please find below and/or attached an Office communication concerning this application or proceeding.

•	Application No.	Applicant(s)
Office Action Summary	69/286,79	4 Baer
	Examiner	Group Art Unit
<u> </u>	1 Klount	2661
-The MAILING DATE of this communication ap	pears on the cover she	et beneath the correspondence address—
Period for Reply		
A SHORTENED STATUTORY PERIOD FOR REPLY IS SEOF THIS COMMUNICATION.	ET TO EXPIRE 3	MONTH(S) FROM THE MAILING DATE
 Extensions of time may be available under the provisions of 37 C from the mailing date of this communication. If the period for reply specified above is less than thirty (30) days If NO period for reply is specified above, such period shall, by de Failure to reply within the set or extended period for reply will, by 	, a reply within the statutory m fault, expire SIX (6) MONTHS	ninimum of thirty (30) days will be considered timely. from the mailing date of this communication.
Status		
★ Responsive to communication(s) filed on	28/03	
☐ This action is FINAL.		
 Since this application is in condition for allowance ex- accordance with the practice under Ex parte Quayle, 	cept for formal matters, pr 1935 C.D. 1 1; 453 O.G.	rosecution as to the merits is closed in 213.
Disposition of Claims		· ·
Ø Claim(s) 49 - 67		is/are pending in the application.
Of the above claim(s)		is/are withdrawn from consideration.
☐ Claim(s)		is/are allowed.
		 is /are rejected.
© Claim(s) 50'-52 and 5	8-67	is /are objected to.
☐ Claim(s)		
Application Papers		requirement.
☐ See the attached Notice of Draftsperson's Patent Dra	wina Review. PTO-948.	
☐ The proposed drawing correction, filed on	• , ,	ed 🗆 disapproved.
☐ The drawing(s) filed on is/are of	ojected to by the Examine	er.
☐ The specification is objected to by the Examiner.		
☐ The oath or declaration is objected to by the Examine	r.	
Priority under 35 U.S.C. § 119 (a)-(d)		•
 □ Acknowledgment is made of a claim for foreign priorit □ All □ Some* □ None of the CERTIFIED copies □ received. 		
	mber)	
☐ received in Application No. (Series Code/Serial Nu	•	T D. da 4 7 0/a))
☐ received in this national stage application from the	International Bureau (PC	
☐ received in Application No. (Series Code/Serial Nu ☐ received in this national stage application from the *Certified copies not received:	International Bureau (PC	
☐ received in this national stage application from the *Certified copies not received:	International Bureau (PC	
☐ received in this national stage application from the *Certified copies not received:	International Bureau (PC	
☐ received in this national stage application from the *Certified copies not received: Attachment(s)	International Bureau (PC	•

U. S. Patent and Trademark Office PTO-326 (Rev. 9-97) Application/Control Number: 09286794

Art Unit: 2661

DETAILED ACTION

Page 2

Drawings

- 1. The proposed drawing correction filed on 11/28/03 has been approved. Although it is not in the form of a pen-and-ink sketch showing changes in red ink or with the changes otherwise highlighted (at least with respect to the area near member 40 in figure 1, wherein nearly all of the members in this area are cross-hatched), it is clear from the record that the drawing changes which were made are appropriate.
- 2. The drawings are objected to because the geometry of figures 1 2 is inconsistent and fails to properly reflect applicants invention. In figure 2, it appears that member 20, even in perspective, is adjoined to the (unlabeled) handle shaped object which displays a plurality of parallel lines. Yet in figure 1, there is a space between member 20 and this handle shaped object (see the portion of the shaft labeled 15) which is not displayed in figure 2. Further, the triangular shaped area 65 shown in figure 1 is not shown in figure 2 as well. Also, member 25 as shown in figure 2 is, even in perspective, disproportionate to the size of member 25 as shown in figure 1. The examiner would suggest (but does not require) that if a new drawing of figure 2 is made, that, to have it resemble figure 1, the shaft assemblage be aligned vertically with the "handle shaped object" placed on top, and a "feathering" of the top of the "handle shaped object", as shown on its top in figure 1, be placed on it.

E,

Application/Control Number: 09286794

Page 3

Art Unit: 2661

A proposed drawing correction or corrected drawings are required in reply to the Office action to avoid abandonment of the application. The objection to the drawings will not be held in abeyance.

- 3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:
 - (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.
- 4. Claims 49 and 53 57 are rejected under 35 U.S.C. 103(a) as being obvious over U.S. patent 5,378,124 to Welch.

With regard to claim 49, Welch teaches, in figure 8, assembling a motor shaft with a motor shaft component comprising providing motor shaft 44 having a non-circular cross section, installing fan impeller 48 *on* the shaft proximate its first end as shown in figures 5 and 6, engaging shaft extension 72 with a second surface geometry which is non-circular with the first surface geometry of the first end of the motor shaft (see figure 9) and then installing a second end of the shaft extension into a lower assembly 64 (pump impeller) as shown in figure 8.

Welch does not, however, explicitly teach installing the fan impeller *onto* the motor shaft, as the shaft extension 72, as shown in figure 6, intervenes between the motor shaft and the fan impeller. However, the examiner believes that this situation is merely an obvious variation of installing a fan impeller *onto* a motor shaft, as claimed, and that it would have been well within the skill of the art to recognize this difference.

Application/Control Number: 09286794

Art Unit: 2661

The examiner notes that for purposes of this rejection, the word "onto" has taken the

Page 4

meaning "touching", and "on" has taken the meaning "in contact with, though not necessarily

touching".

With regard to claims 53 - 54, member 60 shown in figure 8, while apparently part of

member 48, is still a retainer (threaded nut) which is tightened onto the first end of the motor

shaft.

With regard to claim 55, note that member 64 (figure 8) is a pump impeller.

With regard to claim 56, at least member 82 (see col 4, lines 20+) is a "bearing". See also

member 24 in figure 9.

With regard to claim 57, the apparatus limitations are all present in the method rejections

as described above.

5. Claims 50 - 52 and 58 - 67 are objected to as being dependent upon a rejected base claim,

but would be allowable if rewritten in independent form including all of the limitations of the

base claim and any intervening claims.

6. The 112 first paragraph rejections have been withdrawn in view of the clarification

provided by the applicant in paper number 26.

Contact Information

7. Examiner Blount may be contacted at the Patent Office between the hours of

9:00 am to 5:30 P.M. Monday through Friday. His phone number is (703) 305-0319.

SB 2/19/04

JB

DOUGLAS OLMS

Douglas W.C

SUPERVISORY PATENT EXAMINER

TECHNOLOGY CENTER 2600